Listing of Claims

- 1. (Cancelled)
- (Previously presented) The method of claim 5, wherein: the conductivity is less than 80 micro mhos/cm.
- (Previously presented) The method of claim 5, wherein: the conductivity is less than 50 micro mhos/cm.
- (Previously presented) The method of claim 5, wherein: the conductivity is less than 30 micro mhos/cm.
- 5. (Previously presented) A method for preparing silica containing molecular sieves which may be mixed with an organic polymer to create a mixed matrix membrane, the method comprising:
 - water washing silica containing molecular sieves sufficiently to produce water washed molecular sieves which are substantially free of surface remnants, such that when the water washed molecular sieves are subjected to a Sieve Wash Conductivity Test, a wash filtrate is produced having a conductivity of less than 110 micro mhos/cm:
 - washing the silica containing molecular sieves with a basic water solution having a pH of at least 9 prior to the water washing step.
- 6. (Original) The method of claim 5 wherein: the basic water solution has a pH of at least 11.

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- 7. (Previously presented) The method of claim 5, wherein: the water washing is performed continuously until the silica containing molecular sieves are substantially free of the surface remnants.
- (Previously presented) The method of claim 5, wherein: the water washing
 is performed batch wise until the silica containing molecular sieves are
 substantially free of the surface remnants.
- (Previously presented) The method of claim 5, further comprising: calcining the silica containing molecular sieves after the step of water washing has produced sieves which are substantially free of surface remnants.
- 10. (Previously presented) The method of claim 5, further comprising: silanating the water washed silica containing molecular sieves.
- 11 16. (Cancelled)
- 17. (Currently amended) The method of claim 24, 46 wherein: the wash filtrate has a conductivity of less than 80 micro mhos/cm.
- (Currently amended) The method of claim <u>24</u>, <u>46</u> wherein: the wash filtrate has a conductivity of less than 50 micro mhos/cm.
- (Currently amended) The method of claim <u>24</u>, 46 wherein: the wash filtrate
 has a conductivity of less than 30 micro mhos/cm.
- 20 23. (Cancelled)

- 24. (Currently amended) A method of making a mixed matrix membrane, the method comprising the steps of:
 - water washing silica containing molecular sieves sufficiently to produce
 water washed molecular sieves which are substantially free of surface
 remnants, such that when the water washed molecular sieves are
 subjected to a Sieve Wash Conductivity Test, a wash filtrate is
 produced having a conductivity of less than 110 micro mhos/cm;
 - dispersing the water washed molecular sieves into a solvated organic polymer; and
 - allowing the organic polymer to dry thereby creating a mixed matrix

 membrane comprising an organic polymer with the water washed

 molecular sieves dispersed therein; and
 - The method of claim 16, further comprising the step of washing the silica containing molecular sieves with a basic water solution having a pH of at least 9 prior to the water washing step.
- 25. (Currently amended) The method of claim 24, 46, further comprising the step of calcining the water washed silica containing molecular sieves.
- 26. (Currently amended) The method of claim <u>24</u>, 46, further comprising the step of silanating the water washed silica containing molecular sieves.